REMARKS

The Office Action rejected Claims 1-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,856,952 to Shaw ("Shaw"). Applicant would like thank the examiner for the courtesies extended during the interviews of January 22nd and 24th. As discussed during the interviews, independent Claims 1 and 9 are amended herein to clarify the recognized differences between the claimed invention and the prior art. Applicant respectfully submits that the Shaw reference does not teach or suggest the claimed invention, as recited in amended independent Claims 1 and 9, as well as the dependent claims depending therefrom. In light of the foregoing amendments and the following remarks, Applicant respectfully requests reconsideration of the present application and allowance of the claims.

In general, embodiments of the present invention are directed to a reinforcing bar **10**, such as that used to reinforce concrete, having inclined transverse ribs **12** that generally form a thread pattern that spirals around a core **20**. *See, e.g.*, Figures 1-3. The bar **10** further includes at least one longitudinally extending rib **18** that extends longitudinally along the outside of the core **20** thereby interrupting the transverse ribs **12** and obstructing the thread created by the transverse ribs **12**. *See, e.g.*, Figures 1-3. At an end of the bar **10**, the longitudinally extending rib **18** is at least partially removed such that an internally threaded member **26**, such as nut **40**, can be threaded onto the end of the bar **10** without removing all of the transverse ribs on the core **20**. In one embodiment, the longitudinally extending rib **18** is at least partially removed from the end of the bar **10** by removing (or not forming) the portions of the longitudinally extending rib **18** that are located in the troughs **13** adjacent to the end of the bar **10**. *See, e.g.*, Figures 3 and 4. In another embodiment, the longitudinally extending rib **18** is at least partially removed from the end of the bar **10** by removing (or not forming) the longitudinally extending rib **18** for some distance adjacent to the end of the bar **10**. In such an embodiment, the inclined transverse ribs **12** may be separated by a longitudinally extending gap in the thread; however, the thread created by the transverse ribs **12** would be unobstructed and permit an internally threaded member to be threaded onto the end of the bar **10**. *See, e.g.* Figures 5 and 7.

In this regard, independent Claim 1 is directed to a reinforcing bar having at least two series of transverse ribs on a core. Claim 1 recites that the ribs in each series are angled and aligned with the ribs of each adjacent series to form a pattern of threads along said bar. Claim 1

further recites that the at least two series of transverse ribs are separated from each other by at least one longitudinally extending gap and that a longitudinally extending rib is disposed in each longitudinally extending gap. Claim 1 further recites that each longitudinally extending rib is interrupted adjacent one end of said bar such that said longitudinally extending rib defines discontinuous sections in said troughs, whereby an internally threaded member having an internal thread sized to receive said transverse ribs can be selectively threaded onto said pattern of threads formed by said transverse ribs, at said end. Furthermore, Claim 1 clarifies that said discontinuous sections of said longitudinally extending rib do not comprise said pattern of threads.

Similarly, independent Claim 9 is directed to a reinforcing bar having a transversely extending rib forming a pattern of threads on the bar. Claim 9 recites that the reinforcing bar has a longitudinally extending rib that interrupts the transversely extending rib at multiple areas along the bar, thereby, interrupting the pattern of threads along the bar in a first section of the bar. Claim 9 further recites that at least a portion of the longitudinally extending rib is absent from a second section of the bar adjacent an end of the bar such that the pattern of threads is unobstructed in the second section of the bar. Claim 9 also recites that an internally threaded member having an internal thread sized to receive said transverse ribs can be threaded onto said pattern of threads formed by said transverse ribs in the second section.

The Office Action rejects independent Claims 1 and 9 as being anticipated by Shaw. Specifically, the Office Action refers to Figures 5-8 of Shaw and cites the transverse ribs **2A** and **4A** as anticipating the claimed two series of transverse ribs separated by a longitudinal gap. The Office Action cites the trough **3A** as anticipating the claimed trough, and the longitudinal ribs (not labeled in Shaw) as the claimed longitudinal ribs. As agreed to during the interviews, the transverse ribs **2A** and **6A** in Shaw are not "angled and aligned" with the transverse ribs of each adjacent series "to form a pattern of threads along said bar," as recited in Claim 1. Instead, as evidenced by Figure 7 of Shaw, Shaw discloses a reinforcing bar where the transverse ribs **2A** on one side of the longitudinal rib are longitudinally offset from the transverse ribs **6A** on the other side of the longitudinal rib such that they do not form a pattern of threads along the bar.

Furthermore, amended Claims 1 and 9 further recite that the longitudinally extending rib is interrupted or absent from the bar adjacent to an end of the bar such that an internally threaded

member having an internal thread sized to receive said transverse ribs can be threaded onto the pattern of threads formed by the transverse ribs at the end of the bar. As also agreed during the interviews, Shaw does not teach or suggest that the transverse ribs **2A** and **6A** themselves form the threads, and Shaw does not describe reinforcing bar structured such that an internally threaded member having an internal thread sized to receive said transverse ribs can be threaded onto the pattern of threads formed from the transverse ribs **2A** and **6A**, as recited in Claims 1 and 9. To the contrary, Shaw discloses machining the threads on the surface of the transverse ribs. Advantageously, the present invention eliminates the need for this machining step, as the transverse ribs provide the threads. As such, the rejection of Claims 1 and 9, as well as the claims that depend therefrom, as being anticipated by Shaw is overcome.

In response to some of the claim amendments proposed during the interview, the Examiner also argued a new ground for rejection based on Shaw. Particularly, the Examiner argued that the individual pointed ridges **4A** that make up the thread shown in Figures 5-7 of Shaw (i.e., the ridges formed into the transverse ribs **2A** and **6A** on part of the bar) could be viewed as the claimed "transverse ribs," and that, viewed in this manner, Shaw anticipates independent Claims 1 and 9. Applicant, however, respectfully disagrees. Amended Claims 1 is distinguishable from the Shaw reference because the ridges in the thread of Shaw are not "separated transversely from an adjacent series [of ridges] by a longitudinally extending gap" having "a longitudinally extending rib in each said longitudinally extending gap," as recited in Claim 1. Amended Claim 1 is further distinguishable since it recites that each longitudinally extending rib is interrupted adjacent one end of said bar such that said longitudinally extending rib defines discontinuous sections in said troughs, and that said discontinuous sections of said longitudinally extending rib do not comprise the pattern of threads. Therefore, even if one could view the ridges in the thread of Shaw as being the claimed transverse ribs, Shaw does not anticipate Claim 1 since, in Shaw, the sections of the longitudinal rib in the troughs adjacent the end of the bar comprise the pattern of threads, in direct contrast to the invention recited in Claim 1.

Shaw also does not anticipate independent Claim 9 under this new ground for rejection since Claim 9 recites two different sections of the reinforcing bar: (1) a first section in which said longitudinally extending rib intersects the transverse ribs and interrupts the pattern of threads

formed by the transverse ribs, and (2) a second section, adjacent at least one end of said bar, in which the pattern of threads formed by the transverse ribs is unobstructed by the longitudinally extending rib. If the Examiner chooses to view the ridges **4A** in the thread in Shaw as the claimed transverse ribs, then Shaw does not teach or suggest that said longitudinally extending rib intersects the transverse ribs and interrupts the pattern of threads formed by the transverse ribs, as recited in independent Claim 9.

For the reasons described above, Shaw does not teach or suggest the invention as recited in amended independent Claims 1 and 9, as well as the claims that depend therefrom. As such, Applicant submits that the claims of the present application on in condition for immediate allowance.

CONCLUSION

In view of the amendments to the application and the foregoing remarks, it is respectfully submitted that all of the claims of the present application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 13-4365.

Respectfully submitted,

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